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MR. MERRITT'S REVIEW

OF THE

ORIGIN, PROGRESS,

PRESENT STATE, AND FUTURE PROSPECTS

OF THE

WELLAND CANAL.

1852.

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BRIEF REVIEW

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WELLAND CANAL.

BY WM. HAMILTON MERRITT.

ST. CATHARINES :

H. LEAVENWORTH, JOB PRINTER, JOURNAL OFFICE.

1852.

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BRIEF REVIEW.

As few public works in any country have, under similar circumstances, been attended with the like success, it is desirable that the public should be placed in possession of a brief narrative of the facts connected with the Welland Canal, as recorded, from time to time, in the Journals of the Province.

1823.—The first active movement towards the accomplishment of this great National Work, was, in obtaining a survey of the country lying between the Chippawa river and the waters running into lake Ontario, by Hiram Tibetts, Esq., who reported thereon.

1824.—On the 10th of May, a petition for an act of incorporation was presented to the Legislature; and on the 19th day of June, George Keefer, Thomas Merritt, George Adams, William Chisholm, Joseph Smith, Paul Shipman, John Decow, William Hamilton Merritt, and others, were incorporated by the name of the "Welland Canal Company," with a capital of £40,000, divided into shares of £12 10s. each. The stock was subscribed, and the work commenced, on the 30th of November, in the same year.

One of the most striking features in the history of this work is, that notwithstanding the want of means, opposition, and endless embarrassment, its prosecution was not discontinued a single day, until two vessels passed from lake to lake, five years after.

The first project contemplated only the connexion of the Lakes by means of a Boat Canal passing up the valley of the twelve mile creek to the foot of the mountain ridge,—ascending from

thence by a Railway to the Beaverdam,—and thence to the Chippawa, by a second Boat Canal tunneled through the high land on the site of the present Deep Cut.

1825.—As public attention was soon directed to the importance of connecting lakes Erie and Ontario by a Ship Canal of enlarged dimensions, for which the amount of the original stock was quite inadequate, on the 13th day of April, the act of 4th George IV. was amended by the 6th George IV., and the capital increased to £200,000.

Every inducement was held out to capitalists to invest money in the undertaking. As an instance—the 15th clause of the amended act provided, “That it should not be lawful for His Majesty, his Heirs or Successors, at any time to assume the said Canal, unless it should appear from the accounts of the said Company laid before the Legislature, *that the Stockholders shall have received every year, upon an average, the sum of twelve and a half per cent.* for every one hundred pounds he shall be possessed of in the said concern.”

REPORT A.—An able Report, which was published by order of the Board of Directors, at the close of the year, is appended hereto, in order to show that the comprehensive views then entertained, are now realized, as well as the reason why the private Stock was not then subscribed, and the great loss the Shareholders were subjected to in consequence.

The present Lord Bishop of Toronto, Dr. Strachan, who was then a member of the Legislative Council, took a warm interest in this magnificent undertaking, from the first, and did all that was in his power to assist and encourage those who were laboring for its accomplishment.

As early as 1825, when the work was in its infancy, bitterly opposed by some, and distrusted and thought lightly of by others, he drew up a paper setting forth the inestimable advantages it must produce to the commerce and agriculture of the country, and urging its accomplishment by every effort and at whatever cost. The Directors, partaking those sentiments and opinions, were happy to introduce, with his permission, his eloquent ap-

peal into their Report; and the paper I have last referred to, with the exception of such passages as relate to the details of the Company's proceedings, contains Dr. Strachan's sentiments and his early views of the character and objects of this great work, in his own language. They are introduced here, from a conviction that it will be no less gratifying to the venerable Prelate than to his many friends, as well as interesting to the public, to observe how clearly he predicted, when the Company was struggling with its greatest difficulties, the inevitable progress and success of the noble work they were engaged in, and the splendid results it must produce throughout a country which forms a large portion of the globe. When he remarks, in language which many at the time may have thought extravagant, that the Welland Canal will, in time, yield only in importance to the Canal which may hereafter unite the Pacific with the Atlantic ocean, through the Isthmus of Darien, it is interesting to reflect, that he was then contemplating a work which, after an interval of twenty-six years, we now find engaging the attention of the business world on both continents.

1826.—On the 30th day of January, a loan of £25,000 was obtained from the Provincial Legislature, to enable the Directors to prosecute the work until the remainder of the capital stock could be subscribed in England.

On the 24th September, Mr. Galt, Secretary to the Canada Company, apprized the Board, that certain Directors of the Canada Company had consented to act as a Committee, in London, on behalf of the Welland Canal Company.

On the 30th of the same month, a despatch was received from Lord Bathurst, offering, on condition of passing Government vessels and stores free of toll, to advance the same amount to the Welland, as to the Lachine Canal,—one-ninth of the cost,—then estimated at £16,300 sterling, which was accepted, and an act passed accordingly.

1827.—A grant of 13,400 acres of land was made to the Company, on the 17th February; and an act was passed authorizing stock to be taken by the Government, to the amount of £50,000,

on condition that the Company should pay the public the interest on the stock so subscribed, until one year after the Canal was completed. The Legislature of Lower Canada also authorized the subscription by their Government, of stock to the amount of £25,000. This timely aid enabled the Directors to prosecute the work with vigor, through the year ; still, upon the Report at its close, it appears that, although 81 per cent. on all the capital stock subscribed, had been paid in, there remained £88,-879 2s. 6d. to be provided for, to finish the Canal.

Notwithstanding this large deficiency in the amount of means, and the conviction that any further application for aid to the Legislature would be fruitless, the Directors had no other alternative but to proceed with the work. The whole line was then placed under contract, and no reasonable doubt of finishing the Deep Cut, (the most difficult portion of the work,) during the ensuing year, was entertained. Under those circumstances, and after consulting with J. B. Yates, Esq., who became liable for a large sum of money, the Board determined on calling in the remaining 19 per cent. of stock; and adopting the most efficient means to obtain the residue ; and if practicable, to open the navigation during the ensuing season.

1828.—This year, from the Report, it appears that the whole amount of stock had been taken up, and a loan of £50,000 sterling obtained in England, so that the efforts of the Directors to obtain money, had been crowned with success. Also, that the work was so far advanced on the 25th of October, that within ten days the waters of the Chippawa could have been let through the Deep Cut.

Notwithstanding this apparent favorable position of their affairs, an unexpected obstacle arose, the most disastrous yet experienced. Slips occurred in the Deep Cut of so extensive a character, that it became indispensable to abandon the original plan of making the river Welland the summit, and to bring a supply of water on a higher level, from the Grand river, in order to pass over those slides.

The Report of this year, closed with the following remarks. "However great has been the difficulties surmounted, in constructing so formidable an undertaking to its present advanced state, the whole pressure has been borne by the Shareholders; since no aid has been granted by the Government, or by the Legislature,—for which the interest has not been punctually paid up by the Company."

1829.—From the Report of this year, it appears that James Geddes, Esq., one of the most experienced Engineers then in the State of New York, was employed to assist Mr. Barrett in exploring and estimating the cost of bringing the waters of the Grand river from Barefoot rapids, (now Caledonia,) to the Deep Cut, (now Port Robinson.)

After receiving the Report of these gentlemen, one entire day was occupied by the Directors, at the Bank of Upper Canada in Toronto, in discussing this important subject, before the plan of operation was determined on.

It was truly a formidable undertaking. The estimates, which had on former occasions generally fallen short of the expenditure, showed £25,000 was to be provided for, over the balance of money on hand, and no other hope or source remained of procuring it, than from the Legislature.

Nevertheless, as the Canal was nearly finished, from lake Ontario to the Welland river, there was good reason to believe that it was practicable to bring water from the Grand river, and that a vessel could be passed through before the close of the season—in which event, the Legislature could not refuse the grant. The Directors, therefore, after mature consideration, determined on making the attempt, and adopted the following plan.

Bounties were offered for the best plan of a wooden Aqueduct over the river Welland, and a Dam across the Grand river. The remainder of the work was laid out in sections of half a mile in length. Every proposal was to be based on the Contractor being paid a portion of the money on hand, and the balance after the Company obtained the means from the Legisla-

ture. Covenants were inserted in each contract, embracing the above condition; also, that each section should be finished by the 15th August: if not, that part remaining unfinished should be let to any other Contractor; and that so soon as any one section was finished, the force employed should be placed on the nearest adjoining section thereto, so that the whole effective force should be retained until the waters of the Grand river were let into the main Canal. The Contractors hired their laboring men under similar conditions, and thus every man became personally interested in passing a vessel during the navigable season, as it was well understood that on this event alone the Legislature could be induced to make a further loan.

This combination of personal interest produced the anticipated result. Although the season was late—the frost continuing in the ground until the 15th day of April—still the Dam across the Grand river, the Aqueduct over the Welland, four Locks at the Deep Cut, the cut at the mouth of the Chippawa, and twenty-seven miles of Canal, were so far completed on the 9th day of October, as to admit the passing of a vessel from Dunnville down the Feeder. It is questionable whether, apart from the want of money, on any occasion whatever, an equal quantity of work has ever been performed with the same force, in so short a time.

The Report states: “It is not the intention of the Directors to recapitulate the embarrassing difficulties they had to encounter, during the past year; but it is just to say, that had it not been for the confidence manifested by the Contractors, the work must have been suspended altogether. By their indefatigable exertions, under great disadvantages, the Canal was filled; and on the 30th of November, (the anniversary of the day on which the Canal was commenced,) the inhabitants of this District were gratified in witnessing the ascent of two schooners—the *Ann & Jane*, of York, (now Toronto,) and the *R. H. Boughton*, of Youngstown, N. Y.—from lake Ontario to lake Erie.”

The commercial intercourse thus opened, was not *then* appreciated, as appears from the following extract from the Report of the Directors for that year. “It has been their mortification

hitherto, to find, that while with the greatest proportion of strangers who visit the province, the Welland Canal seems to possess a particular interest, the inhabitants of Upper Canada, in general, appear to have the most imperfect ideas of the stupendous nature of this great undertaking—the rapid strides by which it is advancing to its consummation—and the immense advantages to themselves and to their country which must follow the successful termination of a work, that it is probable will be thought hereafter, to reflect some degree of credit upon those by whose encouragement and exertions it has been supported.” When we reflect on all the circumstances connected with this undertaking, up to this period, its success appears almost marvellous.

The disappointment of the Directors in not procuring money from England, is thus alluded to. “The financial arrangements have been attended with difficulties, which they had no reason to expect, because they have arisen from a hesitation to fulfil engagements which the Directors considered to be binding and conclusive, and upon which they, therefore, relied. No such failure, however, has occurred with respect to the Stockholders in America; and they trust, when pains are taken to contrast authentic information with groundless fears and idle reports, any hesitation which has hitherto been exhibited, will be removed.”

Notwithstanding the increased expense and delay incurred by removing the Dam from the mouth of the Grand river,—the slides and sinks at the Deep Cut,—and from the Company’s limited means, it will scarcely be credited, that this great undertaking was so far accomplished, for the very moderate expenditure of £272,795. (For details, refer to table No. 4.)

As a further proof of the want of capital, as well as the little interest felt for the undertaking at this time, only 232 Shares of the capital Stock, amounting to £2,000, was held in all Upper Canada; and only eight individuals held a sufficient number of Shares to qualify them to become Directors, namely: the Hon. John Henry Dunn, President, Hon. John B. Robinson, W. Allan, Henry J. Boulton, D’Arcy Boulton, and Colonel Wells, of

Toronto; George Keefer, of Thorold, and William Hamilton Merritt, of St. Catharines. They never received or looked for any compensation whatever, for their services as Directors; and having accomplished the object for which they undertook this thankless and most arduous duty, they retired, richly entitled to the following appropriate remarks of their successors, in 1833.

“The former Directors are entitled to all praise for their perseverance and patriotism. We would name them individually, but it is unnecessary. The public knows who are, and have been, the undeviating supporters of the undertaking, and by whose exertions the present Directors have the satisfaction to announce, that vessels can now pass from lake Michigan to Prescot.”

1830.—After a critical examination of the expenditure, by a Committee of the House of Assembly, who reported on the 22nd January, “that, although the transactions in the Books embrace an expenditure of upwards of a million of dollars, they saw very little indeed to censure,” the Legislature, by a majority of two, granted a loan of £25,000, which enabled the Company to pay the debts incurred the preceding year.

Robert Randal, Esq., M. P., was appointed a Commissioner under the above act. He made a very satisfactory Report, in December, and continued to be a steady supporter of the work.

1831.—On the 16th March, a Loan of £50,000 was obtained, on condition that the Company should furnish individual security that this sum would complete the whole Canal, Harbors, &c. &c. from lake to lake, without any further grant for that purpose; and should indemnify the Government against the payment of interest on the said Loan, and one-half the principal of the same. John B. Yates, Alexander Yates McDonell, and Wm. Hamilton Merritt became liable for the amount required,

This Loan was obtained on an application for a grant of £200,000, to extend the Canal from the Aqueduct to lake Erie, and finish it throughout, in a durable manner. It was at one time adopted by the House, although subsequently altered to the

above Loan, which is to be regretted, as it failed to accomplish the desired object. However, it was a partial relief, as it enabled the Company to avoid the tardy and circuitous navigation of the Welland and Niagara rivers, and thence up to Point Abino—a distance of fifty miles—by making a Canal of only seven miles in length.

1832.—The *Cholera* materially retarded the prosecution of the work, this year. A greater number of victims fell a prey to this sweeping scourge, on this part of the line, according to the number, than in any other part of Canada.

1833.—Messrs. the Hon. John B. Macaulay, Absalom Shade, and William B. Robinson, were appointed Commissioners this year,—the latter gentleman was appointed Superintendant, and was some years afterwards Chief Commissioner of Public Works, and has at all times rendered the undertaking the most active and efficient support.

Benjamin Wright, Esq., the principal Engineer on the Erie Canal, was employed to report on the work. After a minute examination, we find the following extract, in a letter he addressed to W. B. Robinson, Esq., dated October, 1833 :—

“I can hardly find words to express what I think of the importance of this Canal, (the Welland,) and the auxiliary project of improving the Rapids of the St. Lawrence, to the commercial importance of Montreal and Quebec. All the Western World, which is to be inhabited by its tens of millions of industrious people, is very much inclined to get on to lake Erie ; and when once there, it will show a great want of enterprise in the people of the two Canadas, if they do not compete for this great prize—they *can* do it, and will do it successfully. The New York Canal can never accommodate that World, even with all the auxiliary Railroads which can be made. I may be enthusiastic in my views—I think I am not ; and that Canada ought to be up and doing.”

1834.—The Report of the Directors of the 31st March, closes with the following remarks. “Théré has been no want of exertion or skill in conducting, or economy in executing this ardu-

ous undertaking. The increased expenses and tedious delays, proceeded from causes not within their power to control. The changes made in the line of the Canal, its increased dimensions, alterations of the original plan, and removal of the Dam after the works had been in considerable progress, involved the Company in great additional expense. The losses, delays, disappointments and embarrassments against which the Company have struggled, since the extension of their charter for Ship Navigation, and the failure in procuring the Stock in England, can only be known by those who had examined the subject. The Stockholders alone, who are the most deeply interested, view the undertaking in its true light, and are entitled to the consideration of the country for the sacrifices they have made, and for the spirited manner in which they have sustained the work. They have laid out of their capital for many years, and have *incurred a positive loss*; while the British Government, and Provinces of Upper and Lower Canada, *are positive gainers.*"

The letter of John B. Yates, Esq., to James H. Sampson, Chairman of Committee, gives a brief review of the Canal, up to the present period. It proves that any attempt to construct the Locks of any other material than wood, would have caused an entire failure; because it would have called for an expenditure which, at that time, it would have been impossible to meet. It establishes, also, that no work of similar magnitude has ever been constructed for the same money. And in that document Mr. Yates declares that, from his knowledge of the country by which the Canal will be supported, he has every confidence in the result, provided means shall be furnished to complete it.

On the 16th March, the capital was increased to £250,000, and the Government subscribed £50,000 Stock.

1835.—The Report of this year alludes to the diminution of transportation, caused by the frost and the snow-storm on the night of the 14th May, 1834, which destroyed a great portion of the crops in the Western country,—an event which should not be passed over, unnoticed. Tables were published, giving items of the trade passing the Canal; and their continuance re-

commended, to point out its relative increase, from year to year. The expenditure during the last six years, was £178,724. For a statement of the description of work performed, refer to Report above alluded to.

1836.—From the 27th January to the 13th of April, a Committee of the Legislative Assembly was employed investigating the affairs of the Company, in consequence of charges of Defalcation; and they reported that, although errors existed, no intentional fraud had been brought home to any individual officer of the Company; nor did it appear that the misconduct complained of, in this respect, had benefitted any individuals connected with the management of the Canal.

That the Accountants employed, proceeded to balance the Books, from the commencement of their operations up to the present time; but that the investigation of all the Accounts of the Company, would have occupied them at least six months. After describing the balances of different Accounts, they add,—“But it is quite impossible for the Committee to say whether, upon a general investigation of the whole Accounts, these sums would be increased or diminished.”

“TORONTO, 4th June, 1836.

“P. G. BEATON, Esq.—*Dear Sir:* At your request, I have examined the Journal and Ledger made by you, from the Books of the Welland Canal, and I have no hesitation in expressing my opinion, that the plan you have adopted is a good one, and I should say the best that could have been taken, to ascertain the real expenditure of the work. Of course, I have not examined into the details, but presume, from the appearance of the Journal, with the references to the original Books, that they have been correctly made out, and they appear to balance exactly. Of your own abilities as an Accountant, I never had any doubt, and I think it would have been fortunate for the Directors of the Company if they had always had you as their Accountant.

“Your's, truly,

(Signed,) FRA'S HINCKS.”

On the 4th May, the Secretary, John Clark, Esq., having desired a more general investigation of the Accounts than Messrs. Hincks and Young were enabled to make, the Board, in

consequence, appointed Messrs. Cameron and Murray, Accountants to the Canada Company, and the Bank of Upper Canada, who reported on the 8th June, thus:—

“TORONTO, 8th June, 1836.

“*To the President and Directors of the Welland Canal Company:*

“GENTLEMEN:—In compliance with the request of your President and Secretary, and of the order of your Board, of the 4th ultimo, we have, with the assistance of Mr. Beaton, examined the Books of the Company, from its formation to the close of the year 1835, and now beg to present the result of our investigation, in the accompanying concise balance sheet, showing the expenditure on each particular branch, and the receipts of every description.

* * * * *

“In conclusion, we have to remark upon the whole investigation, that in consideration of the expenditure of so large a sum of money, throughout a period of twelve years, on payment of Accounts kept with upwards of two thousand individuals, that it is very surprising how few errors have occurred; and we believe that there are few undertakings of a similar magnitude, the Accounts of which have been so correctly kept; and the faithful account which the Books afford of the monies received by the Company, must reflect the highest credit on the officers entrusted with their disbursement. We have now to hope, that the result of our investigation will prove useful and satisfactory to the Board of Directors of the Welland Canal Company, and that their minds will be now at rest, respecting imputed Defalcations in the management of the Company's affairs.

(Signed,)

“JNO. M. A. CAMERON,
Accountant to the Canada Co.

(Signed,)

“C. S. MURRAY,
Book Keeper Bank of U. C.”

From the above it is clear that the system adopted in 1830, by which the House of Assembly appointed a portion of the Directors, who were gentlemen holding no personal interest in the undertaking, produced precisely the result which its opposers at the time predicted—fruitful and continued contention. The uniform and most determined opponents of the undertaking, who had uniformly voted against any grant, and all public aid, were selected for management. The appointment of Directors

was made a party question, and the whole period was wasted in useless strife. It, therefore, became evident, that the system of management must be changed.

On the 29th of November, a Committee of the House of Assembly, consisting of Messrs. Jonas Jones, *Chairman*, Cartwright, Chisholm, Rykert, Bockus, Robinson, Norton, McKay, and Richardson, report—"That, from a personal inspection of the whole line, they are impressed with the importance of the work. Considering the obstacles to be surmounted, it has astonished the Committee to see how much has been accomplished. They recommend making the Welland Canal strictly a Public Work, on such terms as will combine the principle of ultimate indemnification to the private Shareholders, with a due regard to the interest and convenience of the public."

The reason assigned was, that the Shareholders had received no equivalent for their outlay, while the public were amply remunerated. In proof of which, they remark in their Report of the 17th December, that the revenue at the Ports of Fort Erie and Chippawa, had increased from £31, (when the Canal commenced in 1824,) to £1,068, in 1835. That it is impossible to estimate the value of the erections, and the land on and above it, which already has added thousands and thousands of pounds to the value of the Province, far exceeding the principal and interest of the outlay.

1837.—On the 4th March, 7th Wm. 4th, cap. 92, was passed, which converted all Loans heretofore made to the Company, by the Provincial Government, into Stock, and authorized a further subscription, on the part of the Government, of £245,000, to complete the Canal in a durable manner, with stone Locks. The sale to the Hydraulic Company was cancelled, and the land re-purchased,—the rents having increased to about £1,000; and the Canal was placed under the control of the Government, by the appointment of three out of the five Directors. This Act appropriated the income to be derived from the Canal, *firstly*, towards the payment of interest on future loans: *secondly*, in the payment of dividends to private Stockholders until it reached

six per cent. ; and *thirdly*, the remainder to be applied to the payment of interest on the previous advances by the Government. The cost of management was to be sustained out of the capital, until the Canal was finished.

1838.—On the 12th of February, the Report [Letter B.] appended hereto, was laid before the Legislature. It is alluded to, to show the striking difference of opinion which existed at the time, between the Directors appointed by the Government, and those appointed by the Stockholders. The publication of this Report, created a distrust in the minds of the Shareholders, respecting the future management of the Canal, which led them to petition, for the first time, that the Government would assume the entire work.

This year, the Directors report an excess of revenue over 1837, of £5,016. Amount of Toll received, £11,704. Hydraulic Rents, £1,077. Total, £12,781. Cost of administration and interest, £6,926. Leaving a dividend on the private capital, of 5 per cent.

The Superintendant, W. B. Robinson, Esq., also reports the clearance of 1,348 Vessels ; and anticipates a large addition to the receipts.

1839.—On the 16th May following, the 4th and 5th Victoria, cap. 48, was passed, authorising the purchase of the private Stock.

1840.—On the 30th January, an Address passed the Assembly unanimously, praying that the Royal assent would no longer be withheld to the act of 1839, for the reasons assigned in the Report, which recommended the property to be re-placed under the control of the private Shareholders. The Royal assent was obtained, in this year, and the Legislature authorized a grant of £500,000, to complete the work.

It was pleasing to witness the change in public opinion, which took place respecting this undertaking. Every grant had been heretofore closely contested. In 1834, Mr. Justice McLean, the Speaker of the Legislative Assembly, and always a prominent supporter of the Welland Canal, carried the bill by his

casting vote ; and without individual security, it could not have been passed.

In 1841, on a division, only two out of eighty members opposed the grant. From this period the interest of the private Shareholders in the work ceased.

1842.—This year the Government assumed the entire control, and commenced the enlargement, under the superintendence of the Board of Works. The expenditure the last six years, was £114,467—averaging about £19,078 per year. See Table 1.

1843.—This year, the aforementioned act was amended, by the act appended hereto, [Letter C.] under the provisions of which, Debentures were issued to the private Shareholders, for the amount of the capital paid in.

The Welland Canal Company have been reproached, from time to time, because the expenditure exceeded the estimates ; but a comparison with any similar work, will prove whether this accusation is well founded or not.

Hiram Tibbetts, Civil Engineer, made out an estimate to improve the channel, in the manner heretofore pointed out, for boats of twenty tons burden, at £10,000.

In 1825, Samuel Clows made an estimate for a ship Canal, with wooden locks, from the mouth of Grand river to lake Ontario, (41 miles, 8 feet water,) at £179,556 13s. 7d. N. Roberts, Geddes, and F. Hall, corroborated portions of the above.

In 1829, the increased expense of raising the summit to Grand river level, by Messrs. Barrett, and Geddes, was estimated at £54,000. The Port Colborne cut, by Mr. Barrett, at £42,346.

In 1836, Committee report, that, from the Reports of Judge Wright and Mr. Hall, and from their own inspection, to make stone Locks 24 feet wide and 110 long, they will not venture to estimate less than £200,000.

In 1838, N. H. Baird and H. H. Killaly, Civil Engineers, estimated the cost of rendering the Welland Canal a permanent and efficient work,—locks 24 feet wide, 110 feet in length, and 8 feet water, £290,949 5s. 5d.

Although the original estimate for the Ship Canal exceeded the expenditure by the Company more than double, it did not materially exceed the cost by the Government purchase of 1843. However, in order to provide a remedy, the Legislature passed an Act to prevent any work, in future, exceeding the estimated cost.

The 15th clause of the act of 1841, which created a Board for the management of our Public Works, provided, that no contract should be entered into, or any money expended on any work on which any public money had been, or shall be appropriated, unless the work can be completed for the sum so appropriated. Under this act, we have the following estimate of the Hon. H. H. Killaly, Chief Engineer, for the completion of the Welland Canal in a permanent and fully sufficient manner, with cut stone Locks, 120 by 26, and 8 feet 6 inches water on the sills—£450,000, Sterling—to be expended as follows: £50,000 in 1841, £150,000 in 1842, £150,000 in 1843, and 100,000 in 1844.

In 1843, the Locks were enlarged to 150 feet by 26 feet 6 inches; and after an investigation by Mr. Power, Civil Engineer, that the work could be done under the above appropriation, the summit was reduced from the level of the Grand river to that of lake Erie.

In 1845, the whole of the above appropriation was expended, and £178,306 provided for. In 1847, £82,876. In 1848, £102,068. In 1850, £134,066. Making in all, £997,316—all of which were sanctioned under the Acts referred to in Statement No. 2.

From the above it will be seen, that even an act of Parliament proves no security against an excess of expenditure over estimates. This clause remained a record of the folly of the Legislature which passed it, and has very properly been repealed.

Having traced the ORIGIN and PROGRESS of this undertaking up to the time it became a Public Work, the amount of PUBLIC WEALTH created by the construction of this Canal may, in some measure, be appreciated by contrasting the prices of transportation before and since it was opened. *Then*, the price of con-

veying a ton of produce from lake Erie to Montreal, was £3: for a ton of merchandize upwards, £6 12s. 6d. *Now*, it is reduced to £1 5s. down, and £1 6s. up. This immense saving in the cost of transportation, all goes into the pockets of the grower and consumer, and far exceeds any estimate ever made by its most sanguine supporters. In fact, a barrel of flour is transported from lake Erie to Ontario, for one-half-penny less than the mere cost of towing.

The increase of Customs, caused by the increased consumption created by this canal, which has been often noticed, far exceeds the amount paid for interest, without reference to the increase of tolls—and it is morally certain, from the continued increase this year, *that the Canal never will, in fact, cost the Public a single farthing*; but, on the contrary, will become one of the most fruitful sources of revenue under the control of the Provincial Government. In proof of which, it is only necessary to refer to the well known Report of Colonel Albert, in 1850, on the Harbors of lake Erie—the exports from which, in Ohio alone, amounted to the enormous sum of \$17,598,656, and imports to \$23,985,000. This immense trade of upwards of forty millions of dollars, embraces only twelve ports on two hundred miles of coast. What then will be the extent of commerce along the coasts of those vast inland Lakes, when the contiguous fertile territory becomes as densely populated as the Ohio side of lake Erie is now?

In concluding this brief Summary of the Origin and Progress of the Welland Canal, it may not perhaps, be inappropriate to quote the following extracts from the Report of 1825.

“No work in Europe or America will bear a comparison with it in usefulness. In touching upon the mighty results which must soon follow its completion, the truth will assume the appearance of the most extravagant exaggeration, to those who do not make themselves acquainted with the singular geographical position of North America. The interior Seas above the Falls of Niagara, contain more than half the fresh water on this planet—bounded by upwards of 400,000 square miles of as fer-

tile land as can be found on the globe, and exceeding in length of coast, five thousand miles. These Seas affording the most beautiful and commodious means of internal communication ever seen, on a scale which human science and human labor, or the treasures of a world, cannot rival—can be approached by ships only through the Welland Canal, with which no other work of the kind in Europe or in Asia, ancient or modern, will bear a comparison in usefulness. It is truly a National object, and ought to be executed on a scale of unrivalled magnitude, at any cost, and at any trouble. It will be cheap at five times the estimated amount of £250,000.

“Such is the importance, and such will be the splendid results, of the work now offered to the notice of those enterprising and enlightened capitalists who may be disposed to contribute to its completion; at the same time that they secure to themselves a participation in its advantages, and a share of the liberal profits which it may reasonably and speedily be expected to produce.”

This vivid description was comprehended at the time, by few. Its truth is *now* universally acknowledged. Its results have and will be realized to the very letter. Who has and who will reap the profit—the private Shareholders, or the Public?

EXPENDITURE, INCOME, &c.

THE following Statistical Statements are exhibited for the purpose of placing before the public, correct information respecting the amount of Expenditure by the Welland Canal Company—the amount paid by the Provincial Government, when purchased in 1842—the amount expended by the Commissioners of the Board of Works, from thence, up to 1852—the annual Income received, and the amount paid for Interest in each year, since the purchase, with an Estimate of the future Income, from 1852 to 1860 inclusive, and the future prospects of the Welland Canal.

TABLE No. 1.

Statement of the total Expenditure on the Welland Canal, up to 1842, including Stock, Loans, Grants, Tolls, Forfeitures, Bequests, and other Disbursements.

1st. Expenditure on the Canal, up to 1836. (See Report of Committee, 17th Dec., 1836. App. No. 3, Journals of 1836-7.)

AMOUNT OF STOCK PAID BY THE									
Government of Upper Canada, 8,600 Shares,	£107,500	0	0						
do. Lower Canada, 2,000 do.	25,000	0	0						
Individuals in Upper Canada, 297 do.	3,712	10	0						
do. Lower Canada, 1,106 do.	13,825	0	0						
do. New Brunswick, 40 do.	500	0	0						
do. New York, 5,570 do.	69,625	0	0						
do. England, 2,411 do.	30,137	10	0						
Forfeited Stock, - - - - -	540	0	0						
								£250,840	0 0
Loaned by the Province, from 1826 to 1831,	100,000	0	0						
do. do. British Government, - -	55,555	11	2						
								155,555	11 2
Tolls in 1830 and 1831, £3,607 14 8½								£406,395	11 2
“ 1832, 2,432 9 8½									
“ 1833, 3,618 1 7½									
“ 1834, 3,719 1 1½									
“ 1835, 3,807 5 11½									
“ 1836, 5,059 3 2									
								£22,243	16 4
Land and Hydraulic Rents, - - - -								554	7 9½
Exchange, - - - - -								7,156	15 5
Bank of Upper Canada Loan Account, - -								1,370	2 3
Donation of the Catholic Bishop of Quebec, -								25	0 0
George Keefer, J. Davis, S. Smith, - -								2,157	4 2
BALANCE SHEET FOR 1836.									
Lands and Hydraulic Rents, -	453	4	5						
Interest, - - - - -	102	11	1					555	15 6
Issues of Welland Canal Notes, - - -								8,115	15 0
Various other small items, - - - -								2,954	18 7
								£45,123	15 0
								£451,519	6 2

2nd. Amount derived from Tolls, from 1837 to 1840, inclusive.

Tolls of 1837	£5,521	4	4	Hydraulic Rents, £697	14	10	£6,218	19	2	
“ 1838	6,723	4	11	“	330	12	11	7,053	17	10
“ 1839	11,710	9	7	“	1,112	2	10	12,822	12	5
“ 1840	19,129	12	2	“	1,098	6	1	20,127	18	3
								<hr/> 46,323	7	8

3rd. Expended under the Act of 1837, 7th William IV., from 1837 to 1843, - - - - - 68,144 0 0

Total Expenditure to 1843, - - - - - £565,986 13 10

From the above data we have the following results:

1st. That no Work of equal magnitude in America, has been constructed at less cost, or with more rigid economy.

The Reports of the Directors, in 1829, after the two first vessels had passed through from Lake to Lake, contains the following remark. "To show the Government and the Stockholders that their money has been economically expended, the following statement is presented:—

"Total Cost of the Welland Canal.

"Amount paid Contractors, on the Estimate of the Engineers,	£243,000
" Awards and Real Estate, - - -	4,853
" Duties to Government, and Interest to Bank U. C.	8,804
" Thomas Proctor, Agent, New York, - -	3,428
" Contingencies, including Salaries, &c. making near five per cent. on the outlay, - - -	12,710
<hr/>	
Total, - - -	£272,795
To 1836—during a period of six years, - -	£178,724
To 1842—during the same period, - - -	114,467
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	293,191

From 1824—covering a period of nineteen years, - £565,986

2nd. The extent of the Works is thus described, in the Report of 1835.

Length of Ship Canal from lakes Erie to Ontario, - -	28 miles.
From Port Robinson to mouth of river Welland, - -	9 $\frac{1}{4}$
From river Welland to Fort Erie, Ship Canal and Towing-path,	18
From Port Maitland to Dunnville, Harbor and Towing-path,	5
From Dunnville to Cayuga, - - - - -	15
<hr/>	
	75 $\frac{1}{4}$
Boat Canal from Junction to Dunnville, - - -	20 $\frac{3}{4}$
<hr/>	

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Embracing in all, a Navigation of one hundred and six miles in length, with an ascent of 358 feet, surmounted by forty wooden Locks; besides the erection of three Harbors—Ports Dalhousie, Maitland, and Colborne—an Aqueduct over the river Welland, 365 feet in length and 24 feet in width, (the best wooden structure in America, designed and built by Marshal Lewis)—a Dam and Embankment over the Grand river, near one mile in width, and fifteen feet deep in the channel—and one and three-quarter miles of the deepest cutting in America, averaging from thirty to fifty-six feet—together with 13,400 acres of Land, in Wainfleet,—and innumerable situations for Hydraulic Power—the rents of which exceed £1,000 per annum."

3rd. In Appendix to Journals of the House of Assembly, (vol. 2, page 155, 31st January, 1839,) we find recorded an Estimate of the progressive increase of the Income anticipated by the Di-

rectors; and by reference to Table No. 2, we find the actual amount realized in those years, which presents the following result.

In 1839, Estimate, £10,000	Amount received, £12,823
1840, " 12,500	" 20,228
1841, " 15,000	" 20,792
1842, " 18,000	" 24,976

The amount actually realized having exceeded the Estimate, in this short space of time, £23,319. The Directors remark: "The estimated progressive increase of Income, is founded upon the receipts of the Erie Canal; and we can see no good reason why the geographical position of this Canal should not realize the same result." The monied value of the Income, in 1842, represented a capital of more than £400,000.

This fact is alluded to merely to prove, that the private Shareholders had no reason to dispose of their property at less than its value—the full amount of principal and interest, which was secured by the Act of 1837; and that it was richly worth all its cost.

COST OF CANAL.

TABLE No. 2.

Statement of the several Amounts paid to the Welland Canal Company, by the Provincial Government of U. Canada, under the 7th William IV., cap. 92, in 1837, which converted all Loans into Stock.

Act 7th Geo. 4, cap. 20, in 1826,	-	-	-	£25,000
8th " 17, 1827,	-	-	-	50,000
11th " 11, 1830,	-	-	-	25,000
1st William IV., 18, 1831,	-	-	-	50,000
3rd " 54, 1833,	-	-	-	7,500
4th " 39, 1834,	-	-	-	50,000
7th " 92, 1837,	-	-	-	68,144
Amount of Debentures to private Shareholders, in 1843,				£275,644
				117,800

Am't for which the Province has issued Debentures, to date, *£393,444

* £172,542 less than its cost. (See Table No. 1.)

Statement of the several Legislative Grants, under the Board of Works, from 1841 to 1851.

Act 4 and 5 Vic. cap. 28, in 1841,	£500,000	0	0	
9 " 63, 1846,	280,000	2	11	
10 and 11 " 34, 1847,	50,000	0	0	
11 " 9, 1848,	68,155	9	5	
	1851,	97,017	0	0
				£995,172 12 4

Total amount of the Provincial Debt incurred by the construction of the Welland Canal, - £1,388,616 12 4

In the Public Accounts, there also appears to be deducted for management and repairs:—

In 1843,	£297	2	8	Am't bro't up, £40,574	6	3	
1844,	19,419	3	6	In 1848,	15,132	16	3
1845,	5,961	8	4	1849,	6,249	13	11
1846,	2,740	16	8	1850,	7,011	17	8
1847,	12,155	15	1	1851,	11,000	0	0

Am't carried up, £40,574 6 3 Making a total of £79,968 14 1

Which is not included in the appropriations, and forms no part of the Public Debt.

TABLE No. 3.

Statement showing the amount expended by the Board of Works, in each year, (including £120,579 18s. 9d. paid the private Shareholders,) up to 1st January, 1852, and the interest accruing thereon.

Year.	Amount expended each year.	Amount on which Interest was payable.	Amount of Interest at 4 per cent.*	Amount paid to the Shareholders.	Interest at 6 per cent.	Total Interest.
1842	34,286	—	—	—	—	—
1843	141,393	176,219	1,393	7,235	—	8,628
1844	219,979	393,198	7,048	7,235	—	14,283
1845	158,449	551,647	15,728	7,235	—	22,963
1846	102,146	653,792	20,000	7,235	3,098	30,333
1847	77,233	731,025	20,000	7,235	9,227	36,462
1848	76,774	807,799	20,000	7,235	13,861	41,096
1849	67,453	875,251	20,000	7,235	18,468	45,703
1850	59,225	934,478	20,000	7,235	22,515	49,750
1851	32,763	967,241	20,000	7,235	26,070	53,305

Total amount of Interest paid, - - - - £302,523

* 4 per cent. is estimated until it reached £500,000—the appropriation under 4 and 5 Vic. being negotiated at that rate of interest—and 6 per cent. on all payments thereafter.

TABLE No. 4,

Shows a statement of Tolls collected on the Welland Canal from 1841 to 1851, both inclusive.

Year.	Gross Revenue.	Year.	Gross Revenue.
1841	£20,792 3 11	Brought forward	£135,378 6 5
1842	- 24,975 11 8	1847	- 30,549 17 8
1843	- 16,159 6 0	1848	- 29,064 7 3
1844	- 26,134 12 11	1849	- 34,741 18 8
1845	- 19,886 10 5	1850	- 37,925 17 7
1846	- 27,410 1 6	1851	- 51,075 1 9

Carried forward, £135,378 6 5 Total am't rec'd £318,714 17 8

These Tables are designed to show the actual Expenditure and Receipts in each year, that the difference between the amount of Toll received, and the Interest paid, during that period, may be ascertained. From which it will be found, that, notwithstanding the great increase of the cost of the Canal over all estimates, and the additional time occupied in finishing the work, the income from 1841 to 1851 exceeds the expenditure, £16,291.

No Interest is calculated on the £275,644 Stock held by the Government, under the provisions of the 7th Wm. IV. 1837, nor the deduction for management, &c., under Table 2, from 1843 to 1851, amounting to £79,968, for the reasons assigned by the Committee, in 1836.

FUTURE PROSPECTS.

TABLE No. 5.

Estimate of the Income and Expenditure of the Welland Canal, from 1851 to 1860.

ESTIMATED INCOME.					
For 1852,	-	£58,500	Brought forward,		£435,635
1853,	-	70,200	For 1857,	-	145,566
1854,	-	84,240	1858,	-	173,180
1855,	-	101,090	1859,	-	209,616
1856,	-	121,305	1860,	-	251,538
			Gross Income for		
Carried forward,		£435,635	nine years,	-	£1,215,235
Equal, for one year, to					£135,026

ESTIMATED EXPENDITURE.

£275,644, Amount of Government Stock, Table No. 2.	
117,800	Private Shareholders, " 4.
2,780	in 1844, - " 3.
172,486	in 1852.
<hr/>	
£568,710	
467,261	Surplus Expenditure over the Guarantee Loan.
<hr/>	
£1,035,971 at 6 per cent.,	- - - - £62,158
500,000 under the Guarantee Loan, at 4 per cent.	20,000
<hr/>	
£1,535,971	
Annual Management and Repairs,	- - - 6,000
<hr/>	
	£88,158
<hr/>	
Leaving an average yearly gain of	- - - - £46,868

The calculations on the future prospects of Income, are based on the same principle as the estimates of 1839, although more clearly defined—the ratio of progress sustained on the Erie Canal, for fifteen years prior to 1849,—and on the Provincial Works of Canada, for the five years they have been in operation, which is found to average 20 per cent. per annum.

In 1851, the tolls were estimated at £48,750, upon the assumption that one-half of the Western trade between lake Erie and the Atlantic, could be attracted through this Canal. (See Report of Commissioner of Public Works, 1850.) This relative proportion of Trade has not been realised, although the income has reached £51,146, making an increase of £13,531 over the preceding year. From this data we may, with some confidence, rely upon the estimates for the future keeping pace with the past. The estimate of the cost of management and repairs, is from the returns of Samuel Keefer, Esquire, Chief Engineer of Public Works.—See Report for 1850, page 19.

The Guarantee Loan of 1841, was made by the Imperial Government, for the express purpose of completing the Welland and St. Lawrence Canals; consequently, only four per cent. interest should be charged on the amount of capital expended.

The revenue of this Canal has now reached so large an amount, and has from year to year been so steadily increasing, that the Income may be calculated with an approximation to certainty. Any necessary amount of capital can, therefore, be commanded, on the security of the work itself, in the monied markets of Europe or America, and at the lowest rates of interest, if the Government desire to negotiate a new loan.

The one million payable at six per cent. matures from 1846 to 1872, and offers a favorable opportunity to negotiate for a reduced rate of interest. However, even if no such reduction is made, the Canal will, in a few years, pay for itself.

RECAPITULATION.

The preceding Narrative proves from official records, that at the commencement of this undertaking, every inducement was held out to foreign residents to become Shareholders—(see Act and Report of 1825,)—that the whole amount of capital was paid in, prior to 1829—that the hazard incurred from withholding the anticipated support, was pointed out, in 1836—that the justice and policy of paying the private Shareholders the full amount of interest so soon as the Canal yielded a sufficient revenue to meet the payment, was fully acknowledged by the Legislature, in that year, and secured by the Act of 1837—(see 1839, above,)—that in 1842 the revenue had increased to £24,976, showing the Canal was really worth more than it cost—that in 1843 it was purchased from the private Shareholders, by the public, at £172,542 less than the amount expended upon it—(see Tables 1 and 2,)—in the same year, the private Shareholders received Debentures, payable in 1863, for the amount of their capital, under the provisions of the 2d clause 7th Vict. Cap. 34—and in 1852, the tolls having realized the stipulated amount, they received Debentures for the back interest, under the 6th clause of the same act, from the time the capital was paid in up to 1843.

By this arrangement the Government has gained the difference between interest payable half yearly on the Debentures which should have been issued in 1843, for the back interest then due, and the interest on Debentures now issued. In addition to which, they are provided with an ample fund from the Canal, to pay it. The private Shareholders have been kept regularly advised of the progressive income of the Canal, and, with few exceptions, the stock remains in the hands of the original Stockholders.

The Locks, Aqueduct, Culverts, and every other structure, have been built of the most durable materials, and in the best manner. For a minute description of its length and distances between leading points, reference is made to the foregoing—under year 1837.

Its dimensions at present are, 45 feet in the bottom, 9 feet deep, with a slope of 2 to 1, leaving a surface of 81 feet ; but it can be easily deepened to ten feet, as that depth is provided for in the summit level.

The Locks Nos. 1 and 2, below St. Catharines, those at Port Colborne and Port Maitland, and the one erected this year, at Allanburgh, are 45 feet wide by 200 long, between the mitres. The remainder from Thorold to St. Catharines, are $26\frac{1}{2}$ feet by 150. When the dimensions of the principal Lock at Allanburgh are increased to correspond with the Aqueduct, the largest Steamers now navigating the St. Lawrence may approach to within four miles of each other, between the two Lakes. There are 33 Locks in all, with Waste-weirs on each level.

The Aqueduct over the river Welland is 316 feet long, 45 feet wide, and 10 feet 8 inches in depth, in order to serve either the Grand river or the lake Erie level.

An additional Towing-path is about being made between Thorold and St. Catharines; and it is contemplated lighting those Locks with Gas, which will enable vessels to pass from lake to lake, in one day and night, without a moment's interruption.

These trifling improvements, with a never-failing supply of water furnished by lake Erie, will make this Canal stand unrivalled not only for its utility, but for beauty and brilliancy.

It is truly a monument of which every Canadian may feel justly proud—not for commemorating heroic deeds, or any particular victory or feat at arms; but for commemorating the establishment of a fountain, from which will flow never-failing sources of wealth for all time to come—for which, be it remembered, we are indebted to the early enterprise of the private Shareholders.

WM. HAMILTON MERRITT.

St. Catharines, 20th August, 1852.

APPENDIX.

[REPORT A.]

WELLAND CANAL COMPANY.

DIRECTORS' REPORT.

To His Excellency Sir P. Maitland, K. C. B., Lieutenant Governor, &c.

To the Honorable the Legislative Council, and to the House of Assembly of the Province of Upper Canada—To the Proprietors of the Welland Canal, and to the Public:

The Directors respectfully submit the following Report.

An act passed the Legislature of the Province of Upper Canada, in February, 1824, incorporating a Company with a capital of £40,000, to cut a Canal for Boat Navigation around the cataract of Niagara, and thus to open a navigation from lake Ontario to lake Erie, by means, in part, of the river Welland, which flows into the Niagara, above the Falls, and from which the Company take its name, being incorporated under the style and title of the Welland Canal Company.

About £10,000, or one-fourth of the whole capital was immediately subscribed, the Company was regularly organized, and the work commenced; but the Directors, upon a minute inspection of the uncommon natural facilities which presented themselves on the line of the Canal, were induced to postpone their operations, from the conviction that such a vast object as that of connecting the upper with the lower basin of the St. Lawrence, demanded a water communication of far greater dimensions than the one contemplated, and capable of admitting all such vessels as usually navigate the Lakes. On referring the plans and estimates to the Stockholders, the conduct of the Directors was highly approved; and it was determined to petition the Legislature for an act authorising them to increase their capital stock to £200,000—a sum trifling as it appears to be, compared with the magnificence of the object to be attained, yet quite sufficient to complete a canal capable of allowing vessels of considerable burthen to pass from one lake into the other, thus opening a continued internal navigation, without breaking bulk, of more than a thousand miles.

The Legislature had only to revert to the peculiar position of the country, to be convinced of the immense advantage that must accrue to the Canadas and to the British Empire, from the completion of this mag-

nificent undertaking, and therefore readily granted the prayer of the petition, by passing an act, on the 13th of April, 1825, enabling the Company to increase their Stock for the purposes therein mentioned, to £200,000.

On the day subsequent to the passing of this act, the Directors assembled, and being anxious to preserve the management of the Company under British influence, they determined to reserve a considerable part of this increased Stock, in order to be offered in the first instance, to subscribers in England. Of the original Stock of £40,000, more than one-half had been subscribed in New-York, and there was little doubt but that the whole capital required, might at once have been obtained in that opulent and enterprising city: whereas, in Canada, the want of capital in the country, precluded any prospect of obtaining subscriptions to so large an amount. Feeling the expediency of immediately obtaining means to proceed with the works which had already commenced, and at the same time being desirous that at least a majority of the Stockholders should be British subjects, the Directors resolved to limit the subscription in New-York to £75,000, which sum was immediately taken up by the old Stockholders, to whom the option was first given, so that at a public meeting which had been advertised for opening books and receiving subscriptions, no subscription could be accepted; and such was the general opinion of the benefit promised by the undertaking, that more than the whole capital would, at that meeting, have readily been subscribed; but the President of the Company, who was present, refused to receive more than the £75,000. Of the remaining Stock, £25,000 has been subscribed in the Canadas, and thus £100,000, or one moiety of the whole, remains to be subscribed in London.

It was deemed requisite that one of the Directors should proceed to London, to afford such explanations and local information as might be requisite to make the necessary arrangements for obtaining the required subscriptions. This mission was entrusted to Mr. Solicitor General Boulton, late Vice-President of the Company, who resigned that office, on his recent departure for England, and with whom Mr. McGillivray, another of the Directors, being about to return to England, is now associated. The delay which has taken place in submitting the object of their mission to the public, in the British metropolis, has arisen from the necessity of procuring correct maps of the country through which the Canal is to pass, and proper sections, reports and estimates of the work itself, for the information of those who might desire to become subscribers. In the mean time, the Canal is rapidly advancing; for the Directors, under the impression that more Stock than they require, would readily be taken in London, and assured at all events, it would be taken in New-York, if an appeal to foreigners should become requisite, did not think it necessary to delay entering into contracts till the subscription was full.

In offering half the Stock of the Welland Canal to the Merchants and Capitalists of the first commercial city in the world, the Directors act

with confidence upon two facts: first, that the other money has been already taken up by the Merchants and Capitalists in New-York and the Canadas, who are well acquainted with the country which this Canal is intended to unite, and who, although in the habit of obtaining six per cent. for their money, [the legal interest in these countries,] consider this as a far more profitable method of employing their capital. The second fact presents itself on reviewing the map of the country, by which it will be seen, that the Canal *must* be the avenue of greater wealth and commerce than any other now on the face of the earth.

In order to render this mighty undertaking familiar to the British public, the Directors beg to be indulged in giving a short review of the causes which led to its commencement, and to the astonishing results which must follow its completion. In March, 1807, the Senate of the United States of America passed a resolution requiring the Secretary of the Treasury, Mr. Gallatin, to report to them, at their next session, on the subject of Roads and Canals. In obedience to this order, the Secretary delivered, on the 4th April, 1808, a most able State paper, in which a general view is taken of the greater number of practicable Canals which could be made with advantage in any part of the Union, some offering benefits which might well be deemed National, others common to several Provinces, and a few only of advantage to individual States, but all tending directly to the augmentation of the power and wealth of the Republic. Among other Canals, one for Sloop Navigation around the Falls of Niagara was suggested, in order to unite lake Ontario with lakes Erie, Michigan, Huron, and Superior. And to preserve the advantage of being the carriers and exporters of their own produce, another Canal, as a continuation of the line from lake Ontario to the Hudson, is also proposed in the same elaborate document.

It is quite evident that this able communication of Mr. Gallatin's, if it has not suggested, has encouraged the different States to undertake and complete many Canals now in operation; and among others, that stupendous work of 365 miles long, which connects lake Erie with the tide waters of the Hudson river; for it follows the line, or nearly so, which Mr. Gallatin points out, till it reaches the place where it becomes necessary to diverge either to lake Ontario or lake Erie.

The Secretary's Report was for several years considered speculative and visionary; and when the practicability of this magnificent canal was first announced by some eminent and intelligent men of the State of New-York, the most distinguished of whom was Governor Clinton, who still lives to enjoy the fruits of his patriotic and persevering exertions, it was treated with contempt and derision. It appeared to be a century before the age; and men incapable of enlarged views, while they were forced to admit that it was splendid on paper, declared it impracticable; that the resources of the whole Union were unequal to the expense; that, if made, it would be useless, and consequently, that the capital would be sunk, or ruinously unproductive. Even political animosity was mingled in the contest; for the advocates of the project being friendly

to moderation, they were stigmatised as men hunting for popularity, by visionary schemes, which must terminate in the ruin and degradation of the State.

When, however, the reiterated explanations of the general utility of Canals, and the vast advantage which must accrue to New-York, by directing to its market all the productions of the Western States, had made an impression on the public mind, and began to dissipate the prejudices of its opposers, the Legislature was induced to pass an act in 1811, to provide for the improvement of the internal navigation of the State; and the Commissioners appointed under this law procured plans and surveys of the proposed Canal, by which it appeared that the expense would be much less than had been anticipated even by the most frugal calculators. This, perhaps, arose from the fact, that sources of expense which in other countries are extremely heavy, here cost nothing, viz: land for the bed of the canal, and the water necessary for its supply. The land was readily and joyfully given by the proprietors, and abundance of water was found wherever it was wanted. These estimates, and the facilities which the face of the country exhibited, opened the eyes of the public, and at length good sense triumphed over every opposition.

A water communication to join the Hudson with the Western Lakes, was now so far from being considered impracticable, or attended with ruinous expense, that it was deemed of easy accomplishment, and of too much utility to be longer delayed. It nevertheless still appeared an undertaking far too great for a Company, or even a single State, and an application was therefore made to the general Government, as well as to those States which were more immediately interested in its accomplishment, for pecuniary assistance.

No aid was given: Congress pronounced it a provincial, not a national object, and the other States immediately interested, had either no available funds, or were not sufficiently convinced of the benefit to themselves to justify any sacrifice.

The State of New-York was, therefore, left entirely to its own resources. But disappointment did not chill the ardor of the friends of the measure: on the contrary, it increased their diligence and zeal. Some delay, however, was produced, by a difference of opinion among intelligent men, whether it would be more advantageous to carry the Canal at once from the Hudson to lake Erie, or first to lake Ontario, and then to pass around the Falls, as had been suggested by Mr. Gallatin.

Those who were for making use of lake Ontario as part of the line, agreed that it was absurd to abandon the navigation of the most noble, the most beautiful, and most commodious means of internal communication ever presented in any part of the world. That to reject such a gift, provided by the bounteous and ever prodigal hand of nature, without any expense, and on a scale which human science and human labor, or the treasures of a world are incompetent to rival, and to institute in its stead, a narrow, winding, obstructed canal, would be an insult to common sense, and would degrade the character of their rising nation:

that a Canal around the Falls of Niagara should be for a Ship Navigation, since it was truly a National object, and ought to be executed on a scale of unrivalled magnitude: that it was a task which, if properly completed, would be of equal duration with the world, and ought, therefore, to be accomplished at any cost, and at any trouble, not grudging the most liberal supplies, or neglecting to apply them with unremitting attention and perseverance till the object is attained. Such a Canal, said they, has been estimated at £250,000, but it is more than probable it will cost more than five times that sum; and yet it will be cheap, for of its vast productiveness there can be no doubt. Already the trade with the Western States is great, notwithstanding the difficulties which it has to encounter; but the rapidity of its increase, from the growth of population, when these difficulties are removed, it is not easy to conjecture. Through this Canal must the whole commerce of the Western countries for ever pass, whether destined to the St. Lawrence, or to the Hudson—to New-York, or Montreal.

Once afloat on lake Ontario, a Canal around the rapids of Oswego, will present a fair competition between both markets, and the commodity will reach the one where its price is highest. This alone is the interest of the producer, and indirectly of the consumer; and by such a communication only can justice be done to the inhabitants of the United States, living on the banks of the Canadian Lakes. To this it was answered, that to cut a Canal around the Falls of Niagara, in order to admit the productions of the Western States into lake Ontario, would be to commit suicide, as it were, on the commerce of New-York. For once afloat on the bosom of Ontario, every thing would proceed to Montreal, where the best Market will generally be found. But were the Markets equal, or even a little better at New-York than at Montreal, the commodities passing through the Canal would proceed to the latter, as they would reach Prescott or Ogdensburgh, only 120 miles from the Canadian Market, in the same vessel as they could the mouth of the Oswego, where the proposed Canal from Ontario to the Hudson is to commence—a point nearly 400 miles, or more than three times that distance, from New-York. Moreover, produce can be conveyed from Prescott to Montreal in thirty hours, and from Oswego to New-York it must take at least eight days. These arguments were decisive with the Merchants of New-York, who were the principal supporters of the Canal, and who, as might have been expected, were little disposed to hazard the loss of a trade so lucrative and immense, by allowing it even a *chance* of passing through another channel. It was, therefore, determined to extend the Canal at once to lake Erie, so that after the productions of the vast countries west of the Falls of Niagara would be once unloaded from the vessels on the Lake into boats on the Canal, there might be no danger of their being diverted from the New-York Market, by the temptation arising from the greater facility of conveyance to Montreal.

There were doubtless other considerations which had great weight with the Legislature of the State of New-York, in persuading them to

adopt the present line of Canal, in preference to the route by lake Ontario. The public mind was indeed too enlightened on the subject of Canals, to relinquish the one proposed between lake Erie and the tide waters of the Hudson; but assistance from other States and the Government, had been asked and refused, and therefore the expense of the more magnificent work appeared far beyond their abilities. Some were even afraid that a Boat Canal through so vast an extent of country, would exhaust the revenues of the State; and it was not without much apprehension that the attempt was made, on a very reduced scale of forty-five feet wide at the top, with four feet water; to extend from the Hudson at Albany, to Buffalo and Black Rock, on lake Erie, a distance of 365 miles.

The commencement of this stupendous work excited the most earnest attention of the inhabitants of Upper Canada. It was likely to deprive them of the advantage of becoming the carriers of all the produce of all the extensive countries belonging to the United States, west of the Falls of Niagara, and to divert much of their own produce to New-York; and although they beheld in the Canal a pledge of peaceable intention on the part of the American people, and a relinquishment by, at least the State of New-York, of any hope of ever conquering the Canadas; and were moreover filled with admiration at the magnitude of the work, it was nevertheless attended with feelings of regret that the resources of the Province were too feeble to enable them to improve their own greatly superior natural advantages.

But in the state and with the prospects of the Colony, at that time;—recovering slowly and with difficulty from the cruel effects of an unnatural and desolating war, in which the inhabitants had suffered most severely, the produce of the soil remaining on the hands of the cultivator, without a Market, and the extension of commerce restricted by the shackles of a Colonial system, the child of a darker age—it seemed hopeless to attempt any competition with their powerful and enterprising neighbors.

So soon, however, as the more liberal policy of the enlightened Statesmen who now direct His Majesty's councils began to be developed, and a prospect was opened to the Colonies of a free commerce with all nations, and of receiving greater privileges and advantages in the ports of the Parent State, as well as in those of each other, a new spirit was infused into the Province, and enquiries were made to ascertain what natural facilities offered themselves for the improvement of Internal Navigation. Accordingly, in 1821, an act was passed by the Legislature, appointing a Board of Commissioners to report upon this interesting subject.

It is due to the memory of the late Mr. Nichol, formerly an active and very intelligent member of the Legislature, to remark, that his zeal in the cause of Public Improvement occasioned this measure to be brought forward at an earlier period than it otherwise would have been; and that so long as he lived he persevered very faithfully in carrying it into effect.

The example of the State of New-York, vigorously engaged in completing an Inland Navigation from the Canadian Lakes to the Ocean—a work which might have well been thought to exceed its power, directed the attention of the Commissioners to the joining of lakes Erie and Ontario, by a Sloop Navigation. This was not only the most obvious, but the most important work which could engage their attention; and accordingly a survey was made by an able Engineer, and estimates of the probable expense carefully calculated.

Subsequent experience and examination have shown, that the route chosen by the Commissioners, though possessing some peculiar advantages, was too circuitous; by which the expense was very much enhanced. The conception was indeed magnificent—the Canal was to have seven feet water, and to admit all such vessels as usually navigated the Lakes; but the execution was far beyond the resources of the Province; and the Legislature was compelled, though not without reluctance, to defer the undertaking till more propitious times, and the growing wealth of the Colony might justify its commencement.

This delay, instead of checking, increased the ardor for Internal Improvement; even persons of moderate temperament were encouraged by the success which attended the opening of every mile of the New-York Canal. No sooner was one section finished, and the water introduced, than the tolls did more than repay the interest of the capital expended; and in prosecuting the work, it was found that, contrary to usual experience, the estimates of the Engineer almost always exceeded the actual expense.

These matters of fact induced some active spirits who had a more immediate interest in connecting the waters of lake Ontario and lake Erie, to examine whether a more favorable line could not be discovered than that which had been adopted by Colonel Nichol and the other Commissioners. It had indeed been conjectured, that there were more convenient routes for a Canal, and accordingly surveys were made at different points; but owing to the ignorance of the persons employed, or the greatness of the expense attending a minute examination, they all came to nothing.

At length several enterprising gentlemen, living on the banks of a small creek, which runs into lake Ontario, called the *Twelve Mile Creek*, the source of which is very near the deep river *Welland*, which communicates through the Niagara river, above the Falls, with lake Erie, were induced to believe, from carefully observing the valley of the Creek and its gentle declination towards lake Ontario, that it afforded singular facilities for Canal navigation. One of these gentlemen, W. H. Merritt, Esq., possessed of great zeal and energy, and to whose exertions in forwarding the Canal, the Province will ever be indebted, entertaining this idea, examined the course of the Creek, and was so much encouraged with the facilities it presented, that procuring the assistance of an experienced Engineer, a line was surveyed, by which it was discovered that very

little cutting would be necessary, and that the Locks could be placed in a ravine of such gradual declivity, that they could be built at sufficient distances from one another.

Pursuing with ardor his object, Mr. Merritt procured plans and sections, as well as estimates of the expense of completing a Canal for Boats, which hardly amounted to £40,000. Having proceeded so far, he very naturally supposed that this sum was not too much to be assumed by a private Company, and many persons thinking well of the project, joined him in petitioning the Legislature that they might be incorporated, with a capital of £40,000, for the purpose of opening a Canal for Boat Navigation, between lakes Erie and Ontario. On passing this law, in the spring of 1824, a large portion of the capital was immediately subscribed, and the work was actually begun; but as we have already noticed, it appearing upon a more minute examination of the route, to be uncommonly favorable, and capable, at little additional expense, in comparison to the object, of admitting an excellent Sloop Navigation; the Directors thought it prudent to pause in their proceedings, and to petition the Provincial Legislature to allow them to enlarge their capital to £200,000, in order to make the Canal capable of receiving such vessels as usually navigated the Lakes.

The proposed Canal, as appears from the Report and Drawings of the Engineer, commences at the mouth of the Twelve Mile Creek, on lake Ontario, and terminates at the mouth of the Grand river, or river Ouse, on lake Erie—a distance of forty-one miles. It may be described, generally, as consisting of *three* great sections: the *first*, of the length of *sixteen miles*, ascending from lake Ontario, passing through a ravine in the mountain ridge, and entering the river Welland, through a deep clay bank which divides it from the mountain ridge, and in which, for a distance of one and three quarter miles, the Canal is to be cut from thirty to fifty-four feet six inches, which is the greatest depth at any one point. This *deep cut* is already under contract, and it is ascertained that the bank consists wholly of clay. It is also a peculiar advantage possessed by this line, that in passing through the mountain ridge, and in a considerable part of the descent from thence into lake Ontario, the Canal follows the direction of the natural ravines, where no excavation will be required, and where it will only be requisite to form embankments in which to construct the Locks, whilst the width of the ravine is such as to form ample reservoirs; and the slope is so easy and regular, that one of these reservoirs will, in almost every instance, be interposed between each two Locks, throughout the descent, and the sloping banks of these ravines, and the abundant and inexhaustible supply of water, afford an almost unlimited power for Hydraulic machinery, which it is intended to connect with the falls at the different Locks, and which, it is hoped, will soon afford a considerable revenue to the proprietors of the Canal. The difference of level from lake Ontario to the river Welland, is about three hundred and thirteen feet, requiring about thirty-five Locks,—and this is the first section to be completed.

The *second* great section of the Canal consists of the river Welland itself, which, for a distance of nearly thirty miles, resembles a Canal more than a running stream, having scarcely a perceptible current, and being from twelve to thirty feet deep, so that it will only be requisite to construct a towing path along its bank. The Canal opens into the Welland about eight miles above its entrance into the Niagara river, at the village of Chippawa; and by that route, on constructing a towing path from the opening of the Canal to the mouth of the Welland, an Inland Navigation around the cataract of Niagara, is in fact accomplished; because, from the mouth of the Welland vessels can sail up the Niagara river into lake Erie; but below Fort Erie there is a strong current in the river, and besides avoiding this impediment to the navigation, in case of vessels ascending, there are other important advantages which will be attained by the intended opening of the Canal into lake Erie through the Grand river. Therefore, in addition to the towing path from the Canal to the mouth of the Welland, there is another towing path to be constructed, ascending the course of the river for a distance of eleven miles—which may be described as constituting the second great section of the Canal.

The *third* great section is a cut of about twelve miles, from the Welland to the Grand river, through a flat, swampy tract of country, called the Canborough or Wainfleet marsh—the surface of which is about eight feet higher than the level of lake Erie. It was at first proposed to cut the Canal on a level with the surface of this tract of country, and to supply it with water from a feeder from the Grand river above the rapids; but the present and the more improved plan is, to cut an excavation through the Canborough Marsh to the depth of sixteen feet, which will render lake Erie at once the summit level, and the feeder of the Welland Canal throughout its whole extent.

At the mouth of the Grand river there is a Harbor to be constructed; and it will thus be seen that the Canal has two outlets for vessels ascending from lake Ontario; one through the Niagara river into the eastern extremity of lake Erie, and opposite to the entrance of the American grand Erie Canal; and another through the Grand river into lake Erie, at a distance of forty miles nearer to the central and western shores of the Lake; besides, with such reduction of distance in Lake sailing, the route by the Grand river offers other important advantages to vessels from the upper parts of lake Erie. From the Grand river to Fort Erie, the navigation on lake Erie is dangerous, and at Fort Erie there is no good Harbor; nor is it ascertained if the new American Harbors at Buffalo and Black Rock will resist the severe gales of wind which are frequent in the fall of the year, and the heavy surf which rolls on the beach at that end of the Lake, where the coast is much more exposed to its violence than at the mouth of the Grand river. The prevailing winds on the Lakes are from the westward; and by a glance at the map it will at once be seen, that a gale of wind from that quarter sets on the beach at Buffalo, with an uninterrupted sweep of above two hundred miles:

whereas, the mouth of the Grand river, partially protected by head lands on each side of its own bay, is further sheltered from the gales of wind, by Long Point, which projects nearly thirty miles into the Lake.

Another circumstance is to be noticed, peculiarly advantageous to the Canal entering at the mouth of the Grand river, and which arises from the form of lake Erie, the prevalence of westerly winds, and the gradual though scarcely perceptible flow of the current towards the outlet of the Lake into the Niagara river, where the current being at length contracted as into a funnel, an accumulation of ice from the Lake regularly takes place every spring, and effectually blocks up the channel; thus forming a barrier which prevents the opening of the navigation at Buffalo and Fort Erie, for a certain time after the ice has disappeared in the rest of the Lake, and after the opening of the Grand river—which, as it flows into the Lake without obstruction, carries away the ice before it, with the first freshet in the spring. This difference of time betwixt the opening of the navigation of the Grand river and river Niagara, has seldom been less than three weeks, and in some seasons has been five weeks; but estimating it at a shorter period, it gives to the Welland Canal the advantage of being open before the American Canal, for three weeks of the most important part of each season.

These general inductions are deemed sufficient for this place: the details and estimates are in the hands of the Directors, who will most cheerfully submit them to the inspection of any person who may be disposed to examine them: they have been drawn up and calculated by an Engineer of great intelligence and professional knowledge, on whose accuracy the Directors, from long experience, have the most perfect reliance. From the whole it is seen at how little expense the Canal may be constructed, and how much the bounty of nature assists in its formation.

It was happy for Upper Canada that the Canal undertaken in the State of New-York, and now almost completed, is on a scale so very small, and is nevertheless attended with immense profit; for this example encouraged the Colonists to attempt what, perhaps, they never would have dared even to imagine—a Canal of similar dimensions. This attempt led to a minute examination of the route—the facilities of which appeared so great that their views gradually expanded, and they began to consider a Canal on a far greater scale as possible, and not greatly beyond their resources. The more they examined the country through which it must pass, the more easy of accomplishment did it appear; and from considering it possible, they began to think it advisable, and even to despise the more humble attempt they had formerly conceived. It was, therefore, equally fortunate that a Canal of similar dimensions with that of our neighbors was at first proposed, and that it has been enlarged from a conviction arising from the existence of local advantages which will render it infinitely more profitable, convenient and important. Such are the causes that led to the project now going forward, of uniting the great Lakes of Canada by a Sloop Navigation.

In touching upon the mighty results which must attend or soon follow the completion of the Welland Canal, the truth will assume the appearance of the most extravagant exaggeration to those who do not make themselves acquainted with the singular Geography of North America. We, therefore, desire all those who are astonished at our remarks, and feel inclined to pronounce them erroneous, to take this preliminary step, by placing a Map before them, and estimating the wonderful water capabilities which present themselves, and the immense countries which can approach the Sea only by the St. Lawrence. Moreover, to judge correctly, those conversant with the largest and most productive of European Canals must divest themselves of prejudices in their favor, and only take into account the facilities of communication which they offer, when compared to those which will be opened by the Welland Canal.

Darby, one of the most faithful of Geographers, who never published a Map till he had traversed on foot the country which it represents, estimates the valley of the St. Lawrence, above the Falls of Niagara, exclusive of the Lakes, at 186,700 square miles; to which we may add the valley of the Ohio, containing 226,000 square miles, when the Canal now cutting between that river and lake Erie shall be finished. Thus the commercial intercourse between the Sea and upwards of 400,000 square miles of fertile land, must pass through the Welland Canal, or the smaller one belonging to the State of New-York. When this fact is considered, the first idea that strikes us, is the impossibility that the produce of countries so vastly extensive can pass through these two Canals, and the necessity that soon must arise for opening other communications to meet the increase of commerce: but as no other can be made with any prospect of success, except by the straits of Niagara, the Welland Canal need fear no competition.

The reader will have a more distinct conception of the magnitude of the intercourse that must soon be carried on through these two Canals, by supposing Great Britain, Spain, France and Germany to be so situated that all their intercourse with other nations must come through one narrow valley, admitting only two or three convenient Roads or Canals—such a supposition gives a vivid image of what must be the case at the straits which divide lake Erie from lake Ontario, and will enable us to form some estimate of the ships and boats that must pass through these Canals, bearing the riches of the Western World to the Atlantic Ocean. Nor are these countries in a state of nature, and without inhabitants; they are indeed thinly peopled, in proportion to their extent; but nearly three millions are scattered over them; and from the known rapidity of the increase of population in new countries, the period is at hand when the quantities of produce will be so great as to compel an enlargement of the present dimensions of the Canal, great and magnificent as they are.

It has been found from experience, that when Agricultural produce has to be carted 130 miles, it ceases to be worth raising, as the expense of bringing it (a barrel of flour for example,) so far, added to that of

raising it, exceeds or equals what can be obtained for it in the Market; hence, at this distance, a check is put upon Agriculture, and the improvement of any country. It has also been found, that water communication, such as that which the Welland Canal opens, is to land carriage as 1 to 25; consequently, commodities can be conveyed by Canal and Lake Navigation 3,250 miles, as cheaply as one hundred and thirty by cartage. But as 130 miles of land carriage ceases to be profitable, let us take the limit of 100 miles, at which a positive advantage accrues; and then a ton will be carried by water, 2,500 miles at the same rate as you can wagon it 100 miles. In applying these facts, deduced from experience, to North America, we see the certainty of improving countries, which, but for this, must for ever have remained in a state of nature, totally inaccessible to civilized man; and discover grounds for believing that all the productions of the upper valley of the Mississippi, the settlement of which is now commencing, will be conveyed to the Ocean by the Welland Canal—thus opening a farther extent of country of 225,000 square miles. Indeed, the communication between the Canadian Seas and the river Mississippi, is now practicable at high water. In the Spring, loaded boats of a considerable size, pass from lake Michigan into the Illinois river, which falls into the Mississippi; and from lake Michigan by the Miami river into the Wabash—a tributary stream of the Mississippi; but it would engage us too much in detail to point out the extraordinary facilities which a bountiful Creator has afforded, for opening water communications between the different parts of this vast continent: it is presumed that enough has been stated, to show the great quantities of produce which, of necessity, must pass thro' the Welland Canal, and it is easy to infer the consequent profits that must accrue to the proprietors.

As the Welland Canal and that which passes through the State of New-York, from lake Erie to the tide-waters of the Hudson, are in some degree rivals, it may not be out of place to state the superior advantages of the former; but in doing this, the Directors disclaim all wish or intention of disparaging the mighty work of their neighbors; for to its astonishing success they are indebted for the commencement of their own. They confine themselves to matter of fact, and to the fair exposition of such matters as are necessary to enable those whose assistance they are soliciting, to form a correct judgment on the subject.

1st. The Welland Canal, passing on the diameter of an ellipsis forty-one miles long, unites both Lakes at little more than half the length of the present communication by Buffalo and the Falls of Niagara.

2nd. Ships passing the Grand river where the Welland Canal begins, have to sail down lake Erie about forty miles to the mouth of the New-York Canal, and here they are nearly as far from lake Ontario as if they were at the entrance of the Welland Canal.

3rd. The Welland Canal, as has been already noticed, has two outlets: vessels may pass from lake Ontario by the Grand river into the broadest parts of lake Erie; or they may proceed down the Welland into Niagara river, and thence up to Buffalo and lake Erie.

4th. Vessels have access three or four weeks sooner every year to the mouth of the Welland Canal, on lake Erie, than to that of the New-York Canal, at Black Rock; add to this, that vessels are often detained many days in the narrows, between Black Rock and Point Abino, a distance of nine miles; but vessels passing through the Welland Canal, get at once into the broad Lake, and therefore make good their passage.

5th. The New-York Canal commences about 500 miles from the Sea, of which 365 miles is a Boat Navigation—at the end of which you are farther from the market of New-York than you are from Montreal, at the extremity of the Ship Navigation opened by the Welland Canal.

6th. The Welland Canal will bring all the commodities of the Western countries, without breaking bulk, within 120 miles of Montreal, and the distance may be passed in less than two days by large boats, on account of the rapidity of the stream; and it will probably, in a few years, be rendered capable of Steam Navigation.

7th. The Welland Canal opens an uninterrupted navigation from Prescott and Ogdensburg, on the river St. Lawrence, for all craft used in navigating the Canadian Seas, to the Western shores of lakes Huron and Michigan, and by removing a trifling obstruction, to the head of lake Superior—a distance of more than twelve hundred miles, or upwards of 3,000 miles of coast.

The late Mr. Fulton, justly celebrated for applying steam with effect, to the purposes of navigation, calculated that one million of tons would pass the Canal, from Buffalo to the tide waters of the Hudson, in a very few years after its completion, (and ten times that quantity in a short period,) which, at one-hundredth part of a dollar per mile, taking the length of the Canal at 350 miles, to avoid broken numbers, will yield a revenue to the State of three and a half million of dollars per annum. This he reckoned as trifling, to the revenue arising from the Canal when the vast regions west of the cataract of Niagara, become full of inhabitants. Supposing an equal quantity, or one million of tons, to pass through the Welland Canal at the same time—it would give four hundred and ten thousand dollars per annum, or more than fifty per cent. on the original expense. Suppose only one-half this quantity to pass, or that the one million of tons is equally divided between the two Canals, we have still \$205,000 per annum, or rather more than 25 per cent. on the capital expended.

If it be said that the State of New-York may remit or greatly lessen the Toll: we answer, that the cost of keeping so long a line of Canal in good repair, is very great, and will never admit of a total relinquishment of duty; but if it were entirely done away, it can be easily demonstrated, that commodities entering the Welland Canal, can be conveyed at less expense to Montreal and Quebec than the same can be carried for to New-York, were the whole toll remitted.

Hence it may be reasonably expected, that this magnificent work will, as a lucrative speculation for the Company, (that is, when accomplished,) be far superior in its advantages to any similar undertaking yet attempt-

ed in any part of the world: and it is, therefore, confidently offered and recommended to the attention of the public, both in Great Britain and in the Canadas, as a project combining the prospect of great success to the Stockholders, with that of the most important benefits to the public: it will tend to draw forth the latent resources of this rising Colony; bring to our ports a portion of the riches of the more fertile half of the United States; and while it must produce immense profit to the Company, it is an object honorable to those by whom it is to be accomplished, and a noble example of enterprise to our more wealthy and more populous sister Colonies.

But in addition to pecuniary advantages to the Company, commercial advantages to the Province, and honorable distinction to those under whose auspices and by whose means this important undertaking is to be accomplished, it is a public measure connected with even higher considerations. Improvements suggest and assist each other, and tend to the nourishment and development of that vivifying principle which exalts one nation above another, and which connects the distant branches of one parent stem to each other, by the ties of common origin, of mutual attachment, and of reciprocal advantage: that principle which has enabled Great Britain to maintain the character of being at the same time the first nation in war, the first in manufactures, the first in public improvement: that principle which enabled the small and scattered population of this young Province successfully to resist the repeated inroads of their powerful invaders, in *war*, and which, it is hoped, may, in *peace*, enable them to follow the great example of the Mother Country, in the career of improvement, and like her, derive wealth and power from the honorable exertion of individual enterprise.

In the progress of improvements, and amongst those *public works* which bestow wealth and power on nations, and which confer permanent distinction on individuals, there are none of equal importance or celebrity with the construction of Canals. The conquests of Louis XIV. are forgotten, or remembered only to be held up to execration; but the Canal of Languedoc remains a blessing to France, and to *his* name a monument of imperishable renown. The Duke of Bridgewater's rank and wealth would not have preserved his name from oblivion; but he will always be remembered, as the man who embarked his fortune in constructing the first Canal in Great Britain, regardless alike of popular prejudices, of friendly remonstrances, and of prophetic threats of ruin. And in our times, and in our immediate neighborhood, it is probable that the name of Dewitt Clinton will always remain associated with the grand Erie Canal of the State of New-York, when the names and the measures of other contemporary Chief Magistrates of States and of Nations, will be consigned to the same forgetfulness which has already swallowed up so many of their predecessors.

The Directors of the Welland Canal Company profess not to be insensible to the honor conferred upon them, in being chosen to begin so noble a work as a Canal for Ship Navigation around the Cataract of Ni-

agara; and as their services are gratuitous, the honor of conducting the undertaking is their only reward. It is one of those rare measures which, though of immense magnitude, is of comparatively easy and absolutely certain accomplishment. The natural advantages of the ground, combined with the inexhaustible supply of water, are such as no other Canal ever had, and such as can be found for no other Canal; and when finished on the intended scale, it will be one of the grandest works ever effected by any country or by any nation. No work in Europe, or in Asia, ancient or modern, will bear a comparison with it, in usefulness, to an equal extent of territory: and it will yield only to the Canal which may hereafter unite the Pacific with the Atlantic Ocean, through the Isthmus of Darien.

But each undertaking has its own peculiar advantages, and the Welland Canal will possess some advantages even over the projected Canal of Darien. The Pacific is already accessible by navigation around the Cape of Good Hope, or Cape Horn; but the interior Seas of North America, which contain more than half of the fresh water in this Planet, and the fertile and extensive shores of which are destined to be peopled by an active, an intelligent, and an enterprising race—boasting their descent from England, and preserving and perpetuating her language and her institutions—these interior Seas can be approached in Ships only through the Welland Canal.

Such is the importance, and such will be the splendid and immense results, of the work now offered to the notice of those enterprising and enlightened capitalists who may be disposed to contribute to its completion; at the same time that they secure for themselves a participation in its advantages, and a share of the liberal profits which it may reasonably and speedily be expected to produce.

[B.]

Report of the Directors of the Welland Canal Company.

To Sir Francis Bond Head, Baronet, C. H. Lieut. Governor, &c. &c. &c.

The Directors of the Welland Canal Company have the honor to forward herewith, their BALANCE SHEET for the year 1837, and Documents explanatory thereof, numbered 1 to 8, together with certain other papers, A. to G., and to Report that,

In consequence of the effective condition in which the works of the Canal had been placed, by the former Board of Directors, no interruption to its navigation has occurred during the past season.

Although the amount of Tolls collected has fallen short of the two preceding years, [D.] the tonnage has greatly increased, [B.] compared with the year 1836. An increase is observable on Lumber, Pork, Salt, Fish, Wheat, Corn, Barley, Rye, and Coals—a decrease on Bricks, Flour, Flax-seed, Fruit, Merchandize, Gypsum, and Tobacco.

The decrease on Merchandize has been above £1,000: whence it may be presumed, that, had no peculiar commercial difficulties existed, the Tolls of the past would have exceeded those of any preceding year.

From the statements of E. and F. it will be perceived, that the average annual cost of Administration, is - - - £3,085 12 6
 The average annual cost of Repairs and Improvements, 13,985 7 6
 The annual Interest on £66,144 8s. 10d. [A.] - - - 3,968 8 9

			£21,039 8 9
Deduct the average amount of Tolls,	£4,999 6 6	}	
Rents, - - - - -	2,000 0 0		6,999 6 6
Average annual loss,	- - - - -	-	£14,040 2 3

It appears, then, that the Canal can only be maintained in its present condition, at an average annual loss of £14,000.

The Report of the Engineers employed, as directed by the 7th Wm. IV. chap. 92, not yet having been received, the result of the permanent construction of the Canal, as regards its Finances, cannot be positively stated; but it may not unreasonably be assumed, that such permanent construction will insure an increased Trade, with a comparatively small annual expenditure for repairs. It does not, however, ensue, that the loss to the public will, therefore, be less; because the interest on the sum which may yet be required to complete the Canal in a permanent manner, together with the cost of Repairs, may, and probably will, exceed £14,000.

There have already been £329,200 of public money expended on the Canal—for a large portion of which, interest is now paid by the Receiver General.

The private Stockholders have not received any interest for their money, amounting to £117,800.

When this enormous expenditure is considered, in connexion with the very small advantage derived by the Province therefrom, it may well be questioned whether it will be more wise to let the Canal go to decay, using it only as a source of water power for driving Mill-machinery, or to embark in expenses, the result of which may be ultimately beneficial, but which, in the mean time, must involve us in Financial difficulties of the gravest kind. *By order of the Board,*

J. S. MACAULAY, *President, W. C. C.*

WELLAND CANAL OFFICE, }
St. Catharines, 12th February, 1838. }

[C.]

An Act to Repeal a certain Act therein mentioned, and to make further provision for enabling the Provincial Government to purchase the Stock held by private parties in the Welland Canal.

[9th DECEMBER, 1843.]

WHEREAS, in and by a certain act of the Parliament of this Province, passed in the fourth and fifth years of the reign of her present Majesty, intituled "An Act to authorize the Stock held by private parties in the Welland Canal to be purchased on behalf of the Province," after reciting that it was desirable to place the Welland Canal under the exclusive control of the Government of this Province, and for that purpose to provide for the purchase from the private Stockholders in that work, of the stock by them held, and which amounted to the sum of one hundred and seventeen thousand eight hundred pounds, it was, amongst other things, enacted, that it should and ought to be lawful for her Majesty's Receiver General, upon an order to that effect from the Governor, Lieutenant Governor, or person administering the Government of this Province, to issue such number of Debentures as might be required, to the several Stockholders in the Welland Canal, for a sum equal to the amount of Stock held by him or them; and that such Debentures should be made redeemable in twenty years from their date, and should bear an interest of two per cent. per annum, on the amount for which they might be issued, for the first two years, three per cent. for the third year, four per cent. for the fourth year, five per cent. for the fifth year, and six per cent. for the sixth and following years—which interest and principal sum should be chargeable on and payable out of the public revenues of the Province: And that whenever the tolls collected on the said Canal, should annually amount to the sum of thirty thousand pounds, it should be lawful for the Governor, Lieutenant Governor, or person administering the Government, to authorize and direct the Receiver General of this Province to issue other Debentures to the original Stockholders, or their legal representatives, for such sums as would make up six per centum interest upon the amount of Stock by them subscribed and paid for, from the time the same should have been actually paid—which Debentures were to be made payable in twenty years from the date thereof, and were to bear interest at the rate of six per centum per annum, payable half yearly, out of the public revenues of this Province—and that nothing in the said act contained should be construed to com-

pel any Stockholder to accept Debentures for the Stock held by him as aforesaid, or in case of refusal to receive the same, to deprive him from being paid from the Tolls and revenues of the Canal, according to the laws then existing having relation to the said Canal:

And whereas, by a certain act of the Parliament of Upper Canada, passed in the seventh year of the reign of His late Majesty King William the Fourth, intituled "An Act to provide for the permanent completion of the Welland Canal, and for other purposes therein mentioned," provision is made for raising, by way of public Loan, the sum of two hundred and forty-five thousand pounds, for the purposes of the said act; and that the Tolls received upon the said Canal, after deducting the amount required for the charges then made thereon, by law, for so much thereof as might be necessary, should, in the first place, be applied to discharge the interest which should accrue upon the said sum of two hundred and forty-five thousand pounds, and the remainder of the income received by the said Company should be divided among the private Stockholders, until it should equal six per cent, on the amount of their investments: And whereas, by reason of difficulties arising from the state of the Provincial Finances of Upper Canada aforesaid, a small part only of the said sum of two hundred and forty-five thousand pounds was actually raised, and the Canal was, therefore, not completed by means of the said Loan: And whereas, the said Canal is in progress of completion, by means of other and larger sums of money received for that purpose, than the sum provided to be raised under the said act: And whereas, therefore, the circumstances contemplated by the said act under which the said private Stockholders were to have received dividends from the income of the said Canal, have not arisen, and cannot now arise; and it is, therefore, expedient to repeal the said provision for the payment of such dividends: And whereas, it is represented to be for the interest of the private Stockholders aforesaid, that the said first in part recited act should be repealed, and other provisions enacted in lieu thereof:

Be it, therefore, enacted, by the Queen's most excellent Majesty, by and with the advice and consent of the Legislative Council and of the Legislative Assembly of the Province of Canada, constituted and assembled by virtue of and under the authority of an act passed in the Parliament of the United Kingdom of Great Britain and Ireland, intituled "An Act to re-unite the Provinces of Upper and Lower Canada, and for the Government of Canada," and it is hereby enacted by the authority of the same,—That the said first in part recited act, and the said act of the Parliament of Upper Canada, in so far as the same relates to the division of the income of the said Canal, or any part thereof, amongst the private Stockholders, shall be and the same are hereby repealed, except in so far as the same repeal any former act or acts of the Parliament of Upper Canada, or of this Province.

II. *And be it enacted*, That there shall be charged upon the Consolidated Revenue Fund of this Province, for the benefit of the private Stockholders in the said Welland Canal, the sum of one hundred and

seventeen thousand eight hundred pounds, currency of this Province, with interest thereon, from the first day of January, in the year of our Lord one thousand eight hundred and forty-three.

III. *And be it enacted*, That it shall and may be lawful for the Governor of this Province, in Council, to direct the Receiver General of this Province to issue such number of Debentures as may be required, to the private Stockholders in the Welland Canal Company, not exceeding the said sum of one hundred and seventeen thousand eight hundred pounds, currency, at a rate of interest not exceeding five per cent. per annum, if the said Debentures and interest shall be payable in England, or not exceeding six per centum per annum, if the said Debentures and interest shall be payable in Canada; and that the Debentures, or other Securities to be issued, shall bear date the first day of January, in the year of our Lord one thousand eight hundred and forty-three, and the interest thereon shall be payable from thence, on the first day of January next succeeding the issue thereof; and from thence half yearly, on the first day of July and the first day of January in each year, until the principal sum shall be paid; and such principal sum shall be made payable in twenty years from the date of the said Debentures.

IV. *And be it enacted*, That it shall and may be lawful for the Governor of this Province, in Council, to direct the issue of the said Debentures to the private Stockholders, according to their respective claims; and such Debentures shall bear the rates of interest above mentioned, and shall be payable either in London or in this Province, as such private Stockholders shall respectively desire, and at such place therein, as the Governor and Council shall direct and appoint: *Provided always*, that nothing in this act contained, shall be held to invalidate or make void any Debentures heretofore issued, under the said first, in part, recited act.

V. *And be it enacted*, That it shall and may be lawful for the Governor of this Province, in Council, to direct the substitution of the Debentures to be issued under this act, in lieu of the said Debentures already issued, upon application of the party holding the same.

VI. *And be it enacted*, That so soon after the completion of the Canal as the Tolls received thereon, for any one year, shall amount to the sum of forty-five thousand pounds, currency of this Province, there shall be charged on the Consolidated Revenue Fund thereof, an amount equal to six per centum per annum on the private Stock subscribed, from the time the same has been paid in, for the benefit of the private Stockholders aforesaid, or their legal representatives.

VII. *And be it enacted*, That it shall be lawful for the Governor of this Province, in Council, at any time after such receipt of Tolls, to direct to be issued to such private Stockholders, or their legal representatives, Debentures for the amount of their respective claims, bearing interest, and payable in the same length of time after their issue, and at the same places respectively, as if the same were issued under the foregoing provisions of this act, to the private Stockholders aforesaid, for the principal sum invested by them.

VIII. *And be it enacted*, That in case any Certificate or Certificates, or other documents, have been issued to any of the said private Stockholders, or their legal representatives or assigns, signifying that they, or any of them, are or shall be entitled to receive the back interest mentioned in the said first, in part, recited act, or Debentures therefor, those who shall lawfully hold such Certificate or other document, shall be entitled to the same payments or Debentures, and to none other, that they would be entitled to, under this act, if such Certificates or other documents had never issued.

ERRATA.—Page 13, after the words “increased or diminished,” on the 20th line, add—Amount expended at this period, £451,519. [See Table No. 1, first part.]

Page 16, 24th line, add—Reference is made to Table No. 1, part 3rd, for a statement of the Estimate of Toll for this year, and the amount realized.

Page 17, line 13, add—The relative amount of the cost of the Canal, and the amount paid, is shown in Table No. 1, first part, and Table No. 2.

NOTE.—The increase of Toll, in the downward trade, (which is the most certain index of the improved prospects of the Canal,) has been obtained for the four first months of the present year, up to 31st July, - - - - £17,114 4 3
For the same period, in 1851, - - - - - 14,286 8 8

Showing a gain of	-	-	-	-	-	-	-	-	£2,827 15 7
Equal to about 20 per cent.									



